

Introduction

Each day in the United States, approximately 6,600 youths ages 12–17 try their first cigarette.¹ An estimated one-third of these young smokers are expected to die from a smoking-related disease if they continue to smoke into adulthood.² Recent data suggest that youth nicotine addiction, with even very limited use, is more rapid than previously thought.³ In order to better understand the scope of the problem, North Carolina has collected extensive tobacco data among middle and high school students since 1999 using the Youth Tobacco Survey (YTS) in coordination with the Centers for Disease Control and Prevention (CDC). The North Carolina YTS, conducted by the Tobacco Prevention and Control Branch of the North Carolina Division of Public Health along with the North Carolina Department of Public Instruction, provides estimates of usage among middle and high school students for various tobacco products (i.e., cigarettes, cigars, smokeless tobacco, pipes and bidis [leaf wrapped, flavored cigarettes from Asia]), as well as information about beliefs and exposure to secondhand smoke. This report summarizes tobacco use prevalence estimates from the 2007 North Carolina YTS and describes changes in prevalence from 1999 to 2007.

Methods

The sampling frame for the YTS sample consisted of all public and charter schools in North Carolina for any given survey year. The YTS is coordinated with the North Carolina Youth Risk Behavior Survey (YRBS) to minimize the burden placed on any given school, so that a school could be selected to participate in either survey but not both in the same year. In 2007, a total of 74 primary sampling units (PSUs) based on Local Education Areas (school districts) were selected in the first stage of sampling in three distinct geographic regions of the state (west, central, and east), and 197 schools were selected from these PSUs in the second stage of sampling. Of these 197 eligible schools, 191 (97%) participated in the 2007 North Carolina YTS. Classes were then randomly selected proportional to overall school enrollment for each school. Participation was voluntary and anonymous, and

district and school parental permission procedures were followed. Students recorded their responses on computer-scannable sheets which were then returned to the state for processing.

Among the students attending the 191 participating schools, 7,431 (3,787 middle school students and 3,644 high school students) completed the survey, resulting in an overall response rate of 80.8 percent. Data were weighted to be representative of students statewide and by region. CDC and RTI International processed the data and generated basic summary data tables. Current use of a specific tobacco product was defined as having used that product one or more times during the 30 days preceding the survey.

Results

Current Prevalence

In 2007, 9.1 percent of middle school students reported current use of any tobacco product (Table 1). Cigarettes (4.5%) were the most commonly used tobacco product, with no statistically significant differences in usage by sex. Cigars (3.9%) were the second most commonly used tobacco product, followed by bidis (2.8%), smokeless tobacco (2.3%), and pipes (2.2%). (Percentages add to more than 9.1 because some students used more than one type of tobacco product.) Blacks (11.7%) were more likely than whites (7.2%) to use any tobacco. No other statistically significant differences were found for any type of tobacco use by race/ethnicity among middle school students.

Among high school students, 26.6 percent reported current use of any tobacco product (Table 2). Cigarettes (19.0%) were the most commonly used tobacco product, with no differences by sex. Cigars (13.0%) were the second most commonly used tobacco product, followed by smokeless or spit tobacco (8.6%), bidis (3.4%), and pipes (3.1%). Males were more likely than females to use cigars, smokeless tobacco, pipes, bidis, and any tobacco. Whites (31.4%) were more likely to use any tobacco product than blacks (17.3%). Moreover, white students were more likely to use cigarettes